

## **4.0 SOCIOECONOMIC EFFECTS AND ENVIRONMENTAL JUSTICE**

This section discusses the distributional patterns of high-minority and low-income populations on a regional basis and characterizes the distribution of such populations adjacent to the Pacific Gas and Electric (PG&E) Pease–Marysville 60 kV Transmission Line Project. This discussion focuses, in the main, on whether the proposed Project has the potential to affect area(s) of high-minority population(s) and low-income communities, thus creating an inconsistency with the intent of the environmental justice policy.

No regional or local environmental justice assessments have been performed by any agencies within the study area.

### **4.1 BACKGROUND**

On February 11, 1994, President Clinton issued an “Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (Executive Order 12898) designed to focus attention on environmental and human health conditions in areas of high minority populations and low-income communities, and promote non-discrimination in programs and projects substantially affecting human health and the environment (59 FR 7629). The order requires the U.S. Environmental Protection Agency (U.S. EPA) and all other federal agencies (as well as state agencies receiving federal funds) to develop strategies to address this issue. The agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of the programs, policies, and activities on minority and/or low-income populations.

### **4.2 CALIFORNIA STATE LANDS COMMISSION POLICY**

The California State Lands Commission (CSLC) has developed and adopted an Environmental Justice Policy to ensure equity and fairness in its own processes and procedures. The CSLC adopted an amended Environmental Justice Policy on October 1, 2002, to ensure that “Environmental Justice is an essential consideration in the Commission’s processes, decisions and programs and that all people who live in California have a meaningful way to participate in these activities.” The policy stresses equitable treatment of all members of the public and commits to consider environmental justice in its processes, decision-making, and regulatory affairs which is implemented, in part, through identification of, and communication with, relevant populations that could

be adversely and disproportionately affected by CSLC projects or programs. This discussion is provided in this document consistent with and in furtherance of the Commission's Environmental Justice Policy. The staff of the CSLC is required to report back to the Commission on how environmental justice is integrated into its programs, processes, and activities (CSLC 2002).

This environmental justice evaluation of the Project has been completed by answering the following three questions sequentially:

(1) Would the Project cause high or adverse public health or environmental impacts on the public?

(2) Do minority or low-income populations exist within the potential impact area of the proposed Project?

(3) If there are any high or adverse Project impacts, would they disproportionately affect minority or low-income populations?

#### **4.3 SETTING (PROJECT STUDY AREA, DEMOGRAPHICS, AND COMMUNITIES OF COMPARISON)**

The study area for the proposed Project consists of 0.50 mile centered on the proposed Project, 0.25 mile on either side of the alignment. The Area of Potential Effects accounts for both construction-related effects on populations in the direct vicinity of the Project, as well as potential effects following completion of the Project, such as aesthetics and community character. This study area is located within 25 block groups in Yuba and Sutter counties. Information regarding racial diversity and income levels of the residents of these block groups is derived from 2000 U.S. Census Bureau information. A summary of this information for the State of California and for Yuba and Sutter counties is provided in Table 4-1, Summary of Census 2000 Demographics for the Region, and Table 4-2, Summary of Census 2000 Race and Ethnicity Demographics for the Region. The minority population percentage in both Yuba and Sutter counties is lower than the state average. Average per capita income in Yuba County is significantly lower than the state average, while in Sutter County it is slightly higher than the state average. Average poverty levels in Yuba County are significantly higher than the state average, while in Sutter County they are slightly lower than the state average.

1 **Table 4-1. Summary of Census 2000 Demographics for the Region**

County	Total Population	Percent Minority (%)	Annual per Capita Income (\$)	Percent Below Poverty Level (%)	Percent Age 65 or Above (%)
Yuba County	70,396	31.8	17,953	20.2	8.8
Sutter County	91,410	29.5	22,744	12.5	12.3
<i>Total for California</i>	33,871,648	40.6	22,711	14.2	10.6

2 Source: U.S. Census Bureau 2000.

**Table 4-2. Summary of Census 2000 Race and Ethnicity Demographics for the Region**

County	Total Population	Percent White (%)	Percent Black or African American (%)	Percent American Indian and Alaska Native (%)	Percent Asian (%)	Percent Native Hawaiian and Other Pacific Islander (%)	Percent Some Other Race (%)	Percent Two or More Races (%)	Percent Hispanic or Latino (of Any Race) (%)	Percent Minority (%)
Yuba County	70,396	68.2	2.1	1.6	7.1	0.3	12.6	8.1	21.9	31.8
Sutter County	91,410	70.5	2.1	0.8	12.5	0.1	8.1	5.9	26.6	29.5
<i>Total for California</i>	33,871,648	59.5	6.7	1.0	10.9	0.3	16.8	4.7	32.4	40.6

3 Source: U.S. Census Bureau 2000.

1 The following discussion provides an overview of federal, state, and regional/local  
2 policies and regulations related to environmental justice.

##### 3 Federal

4 On February 11, 1994, President Clinton issued an “Executive Order (EO) on Federal  
5 Actions to Address Environmental Justice in Minority Populations and Low-Income  
6 Populations” (EO12898) designed to focus attention on environmental and human  
7 health conditions in areas of high minority populations and low-income communities,  
8 and promote non-discrimination in programs and projects substantially affecting human  
9 health and the environment (White House 1994). The order requires the United States  
10 Environmental Protection Agency (U.S. EPA) and all other federal agencies (as well as  
11 state agencies receiving federal funds) to develop strategies to address this issue. The  
12 agencies are required to identify and address any disproportionately high and adverse  
13 human health or environmental effects of their programs, policies, and activities on  
14 minority and/or low-income populations.

15 The 1994 EO on environmental justice (59 FR 7629) set the U.S. EPA on a new road  
16 to prioritize the issue of environmental justice. It requires that the U.S. EPA and all  
17 other federal agencies identify and address disproportionately high and adverse  
18 human health or environmental effects of their programs, policies, and activities in  
19 minority populations and low-income populations in the United States.

20 Subsequently, the U.S. EPA’s Office of Environmental Justice released the  
21 *Environmental Justice Implementation Plan* (U.S. EPA 1996), supplementing the U.S.  
22 EPA’s environmental justice strategy and providing a framework for developing specific  
23 plans and guidance for implementing EO 12898. In 1998, U.S. EPA developed a  
24 framework for the assessment of environmental justice in the preparation of  
25 environmental impact statements and environmental assessments prepared under the  
26 National Environmental Policy Act (NEPA) in its *Final Guidance for Incorporating*  
27 *Environmental Justice Concerns in EPA’s NEPA Compliance Analysis* (U.S. EPA 1998).

##### 28 State

29 In October of 2002, CSLC developed an environmental justice policy to ensure equity  
30 and fairness in its own processes and procedures. In the document, CSLC pledges to  
31 continue and enhance its processes, decisions, and programs with environmental  
32 justice as an essential consideration by implementing several policy measures to

ensure fair treatment of all members of the public in its everyday activities, processes, decision making, and regulatory affairs (CSLC 2002).

### Regional and Local

In some parts of California, Metropolitan Transportation Agencies and Councils of Governments (COGs) have developed environmental justice policies in response to EO 12898, the 1990 Americans with Disabilities Act, the 1990 Clean Air Act Amendments, and the Intermodal Surface Transportation Efficiency Act of 1991. The Feather River Air Quality Management District, a bi-county district between Yuba and Sutter counties, has committed to environmental policy making, community planning, and regulatory enforcement practices that are fair and equitable to all, regardless of age, culture, ethnicity, gender, race, or socioeconomic status (FRAQMD 2008a). At this time, however, neither county has developed a formal environmental justice policy.

## **4.4 ANALYSIS CRITERIA**

According to EO 12898 and CSLC policy (CSLC 2002, 2003), an environmental justice affect would be considered inconsistent if Project construction or operation would cause any minority or low-income population to bear a disproportionate share of an adverse effect.

## **4.5 POLICY ANALYSIS AND CONDITIONS**

### Potentially Affected Populations

Evaluation of minority and low-income populations within the Area of Potential Effects is based on U.S. Census Bureau 2000 data. The Area of Potential Effects of the Project includes 25 block groups within 10 census tracts. Six of these block groups are located in Sutter County, while the remaining 19 are located in Yuba County. According to census data, these 25 block groups include a total population of 25,823 persons (U.S. Census Bureau 2000).

Potential environmental justice areas of concern within the potential Project Area of Potential Effects were identified using a methodology outlined in the U.S. EPA Region 4 Interim Policy to Identify and Address Potential Environmental Justice Areas. This methodology involves comparing average minority and low-income population percentages within block groups in the Area of Potential Effects to threshold values.

1 These threshold values are calculated by multiplying the county average for which the  
2 block group is located by 1.2.

3 *Low-Income Populations*

4 Table 4-3, Low-Income Populations in the Area of Potential Effects, shows the  
5 populations below the poverty level and the average per capita income in the block  
6 groups in the Area of Potential Effects of the Project. The block groups crossed by the  
7 Project had an average per capita income of \$16,245 in Yuba County and \$21,524 in  
8 Sutter County, both of which are slightly lower than the county averages of \$17,953 and  
9 \$22,711, respectively. Additionally, the average percent of population below the poverty  
10 level in the potentially affected block groups in Yuba County (26.9 percent) is higher  
11 than the average for Yuba County (20.2 percent). In Sutter County, the data indicate  
12 that in the one potentially affected block group, none of the population is below the  
13 poverty level.

14 In all, nine of the 19 block groups in Yuba County contain low-income populations that  
15 would be potentially affected, while one of the six block groups in Sutter County  
16 contains low-income populations that would be potentially affected.

17 *Minority Populations*

18 Table 4-4, Minority Populations in the Area of Potential Effects, shows the relative  
19 minority populations in the block groups in the Area of Potential Effects of the Project.  
20 The block groups crossed by the Project had an average minority population of 28.1  
21 percent in Yuba County and 22.1 percent in Sutter County, both of which are lower than  
22 the county averages of 31.8 percent and 29.5 percent, respectively.

23 In all, three of the 19 block groups in Yuba County contain minority populations that  
24 would be potentially affected, while none of the block groups in Sutter County contain  
25 minority populations that would be potentially affected.

**Table 4-3. Low-Income Populations in the Area of Potential Effects**

Block Groups in Potential Impact Area	Total Population	Population Below Poverty Level	Percent Below Poverty Level (%)	Per Capita Income (\$)	Contains Low-Income Populations Potentially in Project Impact Area <sup>1</sup>
<b>Yuba County (countywide average)</b>	<b>70,396</b>	<b>14,220</b>	<b>20.2%</b>	<b>\$17,953</b>	—
Block Group 1, Census Tract 401	780	262	33.6	12,814	YES
Block Group 2, Census Tract 401	835	96	11.5	18,797	NO
Block Group 3, Census Tract 401	870	248	28.5	11,196	YES
Block Group 4, Census Tract 401	869	285	32.8	14,089	YES
Block Group 5, Census Tract 401	688	238	34.6	10,864	YES
Block Group 6, Census Tract 401	564	21	3.7	10,645	YES
Block Group 1, Census Tract 402	517	23	4.4	18,483	NO
Block Group 2, Census Tract 402	763	28	3.7	30,715	NO
Block Group 3, Census Tract 402	2,010	306	15.2	14,930	NO
Block Group 4, Census Tract 402	904	89	9.8	18,227	NO
Block Group 5, Census Tract 402	982	167	17.0	14,602	NO
Block Group 6, Census Tract 402	982	73	7.4	13,833	YES
Block Group 7, Census Tract 402	1,015	287	28.3	12,246	YES
Block Group 8, Census Tract 402	818	149	18.2	15,784	NO
Block Group 2, Census Tract 403	1,814	716	39.5	9,582	YES
Block Group 4, Census Tract 404	687	231	33.6	8,370	YES
Block Group 1, Census Tract 409.01	972	171	17.6	15,826	NO
Block Group 4, Census Tract 410	1,105	90	8.1	15,718	NO
Block Group 5, Census Tract 410	783	40	5.1	41,926	NO
<b>SUBTOTAL</b>	<b>17,958</b>	<b>3,520</b>	<b>18.6% (avg.)</b>	<b>\$16,245 (avg.)</b>	—
<b>Sutter County (countywide average)</b>	<b>91,410</b>	<b>11,426</b>	<b>12.5</b>	<b>22,711</b>	—
Block Group 1, Census Tract 501.01	1,932	154	8.0	20,064	NO
Block Group 1, Census Tract 506.01	1,334	156	11.7	20,567	NO
Block Group 1, Census Tract 506.03	643	72	11.2	18,998	NO
Block Group 2, Census Tract 506.03	655	0	0.0	13,466	YES
Block Group 3, Census Tract 506.03	1,832	84	4.6	28,349	NO
Block Group 1, Census Tract 506.04	1,520	15	1.0	27,698	NO
<b>SUBTOTAL</b>	<b>7,916</b>	<b>481</b>	<b>6.1% (avg.)</b>	<b>\$21,524 (avg.)</b>	—

Note:

<sup>1</sup> Block Groups with potentially significant low-income populations are those block groups with populations with annual per capita income below 0.8 times the average for the county in which the block group is located or populations with a percentage of persons below poverty level above 1.2 times the county average.

Source: U.S. Census Bureau 2000.

**Table 4-4. Minority Populations in the Area of Potential Effects**

Block Groups in Potential Impact Area	Total Population	Minority Population	Percent Minority (%)	Contains Minority Populations Potentially in Project Impact Area
<b>Yuba County (countywide average)</b>	<b>70,396</b>	<b>22,386</b>	<b>31.8%</b>	<b>—</b>
Block Group 1, Census Tract 401	780	186	23.8	NO
Block Group 2, Census Tract 401	835	182	21.8	NO
Block Group 3, Census Tract 401	870	402	46.2	YES
Block Group 4, Census Tract 401	869	291	33.5	NO
Block Group 5, Census Tract 401	688	264	38.4	YES
Block Group 6, Census Tract 401	564	191	33.9	NO
Block Group 1, Census Tract 402	517	89	17.2	NO
Block Group 2, Census Tract 402	763	103	13.5	NO
Block Group 3, Census Tract 402	2,010	612	30.4	NO
Block Group 4, Census Tract 402	904	273	30.2	NO
Block Group 5, Census Tract 402	982	171	17.4	NO
Block Group 6, Census Tract 402	982	371	37.8	NO
Block Group 7, Census Tract 402	1,015	184	18.1	NO
Block Group 8, Census Tract 402	818	238	29.1	NO
Block Group 2, Census Tract 403	1,814	627	34.6	NO
Block Group 4, Census Tract 404	687	268	39.0	YES
Block Group 1, Census Tract 409.01	972	181	18.6	NO
Block Group 4, Census Tract 410	1,105	311	28.1	NO
Block Group 5, Census Tract 410	783	177	22.6	NO
<b>SUBTOTAL</b>	<b>17,958</b>	<b>5,121</b>	<b>28.1% (avg.)</b>	
<b>Sutter County (countywide average)</b>	<b>91,410</b>	<b>26,966</b>	<b>29.5%</b>	<b>—</b>
Block Group 1, Census Tract 501.01	1,932	418	21.6	NO
Block Group 1, Census Tract 506.01	1,334	394	29.5	NO
Block Group 1, Census Tract 506.03	643	121	18.8	NO
Block Group 2, Census Tract 506.03	655	104	15.9	NO
Block Group 3, Census Tract 506.03	1,832	404	22.1	NO
Block Group 1, Census Tract 506.04	1,520	378	24.9	NO
<b>SUBTOTAL</b>	<b>7,916</b>	<b>1,819</b>	<b>22.1% (avg.)</b>	<b>—</b>

Note:

<sup>1</sup> Block groups with potentially significant minority populations are those block groups with minority populations above 1.2 times the average for the county in which the block group is located and residential buildings within the potential Area of Potential Effects.

Source: U.S. Census Bureau 2000.



Identification of Disproportionately High and Adverse Environmental Effects

When determining whether environmental effects disproportionately impact relevant populations, the following factors are considered:

- Would there be an effect on the natural or physical environment that significantly and adversely affects the identified minority, or low-income population?
- Would the environmental effects of the Project result in an adverse impact on the identified population that appreciably exceeds or is likely to appreciably exceed that impact on the general population or other appropriate comparison group?
- Would the environmental effects occur in the identified minority population that is affected by cumulative or multiple adverse exposures from environmental hazards?

Potential environmental effects that could result from the Project are addressed in Section 3.0, Environmental Analysis, of this Mitigated Negative Declaration (MND). As described in Section 2.0, Project Description, the proposed Project would reconfigure the existing Pease–Marysville 8.3-mile single-circuit 60 kV transmission line to a double-circuit line. No change in alignment is proposed, and the transition from a single-circuit line to a double-circuit line would not result in unmitigable significant impacts. All work would be contained within the existing PG&E right-of-way, with the exception of an existing franchise or utility corridor area along the north of Pease Road between the Pease Substation and State Route 99.

No effects resulting from the proposed Project would significantly or adversely affect minority or low-income populations. The condition of the transmission line following completion of the Project would be very similar to pre-Project conditions in terms of its impact on the surrounding community, and thus would not result in any adverse effects that appreciably exceed or are likely to appreciably exceed that impact on the general population. In fact, the need for the Project stems from increased residential development in the northern area of Yuba City and Marysville, both of which are areas included in this analysis. As a result, Project construction would not cause an inconsistency with CSLC’s adopted policy.

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## **5.0 MITIGATION MONITORING PROGRAM**

As the Lead Agency under the CEQA, the CSLC is required to adopt a program for reporting or monitoring regarding the implementation of mitigation measures for this Project, if it is approved, to ensure that the adopted mitigation measures are implemented as defined in this MND. This Lead Agency responsibility originates in Public Resources Code section 21081.6(a) (Findings), and the CEQA Guidelines sections 15091(d) (Findings) and 15097 (Mitigation Monitoring or Reporting).

### **5.1 MONITORING AUTHORITY**

The purpose of a Mitigation Monitoring Program (MMP) is to ensure that measures adopted to mitigate or avoid significant impacts are implemented. An MMP can be a working guide to facilitate not only the implementation of mitigation measures by the Project proponent, but also the monitoring, compliance and reporting activities of the CSLC and any monitors it may designate.

The CSLC may delegate duties and responsibilities for monitoring to other environmental monitors or consultants as deemed necessary, and some monitoring responsibilities may be assumed by responsible agencies, such as affected jurisdictions and cities, and the California Department of Fish and Game (CDFG). The number of construction monitors assigned to the Project will depend on the number of concurrent construction activities and their locations. The CSLC or its designee(s), however, will ensure that each person delegated any duties or responsibilities is qualified to monitor compliance.

Any mitigation measure study or plan that requires the approval of the CSLC must allow at least 60 days for adequate review time. When a mitigation measure requires that a mitigation program be developed during the design phase of the project, the Applicant must submit the final program to CSLC for review and approval for at least 60 days before construction begins. Other agencies and jurisdictions may require additional review time. It is the responsibility of the environmental monitor assigned to each spread to ensure that appropriate agency reviews and approvals are obtained.

The CSLC or its designee will also ensure that any deviation from the procedures identified under the monitoring program is approved by the CSLC. Any deviation and its correction shall be reported immediately to the CSLC or its designee by the environmental monitor assigned to the construction spread.

1   **5.2    ENFORCEMENT RESPONSIBILITY**

2    The CSLC is responsible for enforcing the procedures adopted for monitoring through  
3    the environmental monitor assigned to each construction spread. Any assigned  
4    environmental monitor shall note problems with monitoring, notify appropriate agencies  
5    or individuals about any problems, and report the problems to the CSLC or its designee.

6   **5.3    MITIGATION COMPLIANCE RESPONSIBILITY**

7    The Applicant is responsible for successfully implementing all the mitigation measures in  
8    the MMCRP, and is responsible for assuring that these requirements are met by all of its  
9    construction contractors and field personnel. Standards for successful mitigation also are  
10   implicit in many mitigation measures that include such requirements as obtaining permits  
11   or avoiding a specific impact entirely. Other mitigation measures include detailed success  
12   criteria. Additional mitigation success thresholds will be established by applicable  
13   agencies with jurisdiction through the permit process and through the review and  
14   approval of specific plans for the implementation of mitigation measures.

15   **5.4    GENERAL MONITORING PROCEDURES**

16   **Environmental Monitors.** Many of the monitoring procedures will be conducted during  
17   the construction phase of the Project. The CSLC and the environmental monitor(s) are  
18   responsible for integrating the mitigation monitoring procedures into the construction  
19   process in coordination with the Applicant. To oversee the monitoring procedures and to  
20   ensure success, the environmental monitor assigned to each construction spread must  
21   be on site during that portion of construction that has the potential to create a significant  
22   environmental impact or other impact for which mitigation is required. The  
23   environmental monitor is responsible for ensuring that all procedures specified in the  
24   monitoring program are followed.

25   **Construction Personnel.** A key feature contributing to the success of mitigation  
26   monitoring will be obtaining the full cooperation of construction personnel and  
27   supervisors. Many of the mitigation measures require action on the part of the  
28   construction supervisors or crews for successful implementation. To ensure success,  
29   the following actions, detailed in specific mitigation measures, will be taken:

- 30       • Procedures to be followed by construction companies hired to do the work will be  
31       written into contracts between the Applicant and any construction contractors.

Procedures to be followed by construction crews will be written into a separate document that all construction personnel will be asked to sign, denoting agreement.

- One or more pre-construction meetings will be held to inform all and train construction personnel about the requirements of the monitoring program.
- A written summary of mitigation monitoring procedures will be provided to construction supervisors for all mitigation measures requiring their attention.

**General Reporting Procedures.** Site visits and specified monitoring procedures performed by other individuals will be reported to the environmental monitor assigned to the relevant construction spread. A monitoring record form will be submitted to the environmental monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the environmental monitor. A checklist will be developed and maintained by the environmental monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The environmental monitor will note any problems that may occur and take appropriate action to rectify the problems.

**Public Access to Records.** The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available for public inspection by the CSLC or its designee on request.

## **5.5 MITIGATION MONITORING TABLE**

The following sections present the mitigation monitoring tables for each environmental discipline. Each table lists the following information, by column:

- Impact (impact number, title, and impact class);
- Mitigation Measure (title only; full text of the measure is presented in Section 3.0);
- Location (where the impact occurs and the mitigation measure should be applied);
- Monitoring/reporting action (the action to be taken by the monitor or Lead Agency);
- Effectiveness criteria (how the agency can know if the measure is effective);
- Responsible agency; and
- Timing (before, during, or after construction; during operation; etc.).

1 **Table 5-1. Mitigation Monitoring Program – Aesthetics**

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>AES-4:</b> Nighttime lighting and glare could be a nuisance to nearby residents.	<b>MM AES-4:</b> Nighttime lighting and glare reduction techniques.	Entire alignment	Observe nighttime construction activities to verify compliance.	Minimizes lighting disturbance outside the work area and to local residences/sensitive receptors.	CSLC	During nighttime construction

2 **Table 5-2. Mitigation Monitoring Program – Agriculture Resources**

Impact	Applicant Proposed Measure/Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>AGR-3:</b> Temporary disruption to farmland and/or removal of orchard trees or temporary fallowing of rice fields would result in a direct impact to agricultural resources.	<b>APM AGR-3:</b> Full compensation to owner/farmer of agricultural resource.	Within active agricultural areas	PG&E to provide proof that compensation has been agreed to/paid to owner/farmer.	Provides for economic compensation to farmer/owner of farm resources.	CSLC	Prior to construction
	<b>MM AGR-3:</b> Advanced notification of project activity.	Entire alignment	PG&E to notify landowners, aerial operators, Sutter and Yuba County Farm Bureaus.	Provides advance warning of Project activity to allow local agricultural operators to plan around construction.	CSLC	30 days prior to construction

1 Table 5-3. Mitigation Monitoring Program – Air Quality

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>AQ-4:</b> Potential to expose sensitive receptors to substantial pollutant concentrations.	<b>MM AQ-4a:</b> Fugitive Dust Control Plan.	Entire Alignment	PG&E to provide proof that Feather River Air Quality Management District (AQMD) has approved plan.	Fugitive dust is minimized throughout construction and has been controlled outside the work area.	CSLC Feather River AQMD	Prior to construction
	<b>MM AQ-4b:</b> Fugitive dust control measures.	Entire Alignment	PG&E to observe construction activities to verify compliance.	Fugitive dust is minimized throughout construction and has been controlled outside the work area.	CSLC Feather River AQMD	During construction
	<b>MM AQ-4c:</b> Construction equipment limits per Feather River AQMD Regulation III, Rule 3.0, Visible Emissions limitations.	Entire Alignment	PG&E to review construction vehicle documentation and provide proof that limits are implemented.	Exhaust emissions are minimized.	CSLC Feather River AQMD	Prior to and during construction
	<b>MM AQ-4d:</b> Construction equipment shall be properly maintained.	Entire alignment	PG&E to review construction vehicle maintenance documentation and provide proof that equipment is properly maintained.	Exhaust emissions are minimized.	CSLC Feather River AQMD	Prior to and during construction
	<b>MM AQ-4e:</b> Restriction of idling time to no more than 5 minutes.	Entire alignment	PG&E to observe construction activities to verify compliance.	Exhaust emissions are minimized.	CSLC Feather River AQMD	During construction
	<b>MM AQ-4f:</b> Restriction of power generation sources.	Within residential areas	PG&E to observe construction activities to verify compliance.	Exhaust emissions are minimized in sensitive residential areas.	CSLC Feather River AQMD	During construction
	<b>MM AQ-4g:</b> Registration of applicable portable equipment with California Air Resources Board (CARB).	Entire alignment	PG&E to provide proof that equipment registration and permitting requirements have been met.	Exhaust emissions are minimized.	CSLC CARB Feather River AQMD	Prior to construction

1 Table 5-4. Mitigation Monitoring Program – Biological Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>BIO-1:</b> Potential impacts to special-status wildlife species (invertebrates [i.e., fairy shrimp]).	<b>MM BIO-1a:</b> Conduct preconstruction surveys to identify and map all seasonal wetlands.	In vicinity of poles 4/79 and 4/80	PG&E to map and mark seasonal wetlands on construction drawings or Project maps. PG&E to monitor for compliance.	Avoidance of seasonal wetlands.	CSLC	Prior to and during construction
	<b>MM BIO-1b:</b> Best management practices for construction adjacent to seasonal wetlands.	In vicinity of poles 4/79 and 4/80	PG&E to review best management practices. PG&E to monitor for compliance.	Prevention of fill or sediment runoff from entering seasonal wetland feature.. Confirmation by Environmental Monitor	CSLC	Prior to and during construction
	<b>MM BIO-1c:</b> Seasonal activity limitations (work limited to dry season only) for construction activities adjacent to seasonal wetlands.	In vicinity of poles 4/79 and 4/80	PG&E to review Project plans to determine approximate timing of work in the vicinity of Poles 4/79 and 4/80. PG&E to monitor for compliance.	Prevention of fill or sediment runoff from entering seasonal wetland feature. Confirmation by Environmental Monitor.	CSLC	Prior to and during construction
<b>BIO-1:</b> Potential impacts to special-status wildlife species (valley elderberry longhorn beetle).	<b>MM BIO-1d:</b> Preconstruction surveys to identify and map elderberry shrubs within 100 feet of work areas.	In vicinity of Poles 2/47 to 2/50, 6/130 and 7/152	PG&E to map and mark elderberry shrub on construction drawings or Project maps. PG&E to monitor for compliance.	Prevent damage to elderberry shrubs.	CSLC	Prior to and during construction
	<b>MM BIO-1e:</b> Establish avoidance areas 20 feet from dripline of all elderberry shrubs within or adjacent to work areas.	In vicinity of Poles 2/47 to 2/50, 6/130 and 7/152	PG&E to map and mark avoidance areas on construction drawings or Project maps. PG&E to monitor for compliance.	Prevent damage to elderberry shrubs.	CSLC	Prior to and during construction



Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	<b>MM BIO-1f:</b> Best management construction practices implemented within 100 feet of marked elderberry shrubs.	In vicinity of Poles 2/47 to 2/50, 6/130 and 7/152	PG&E to map and mark elderberry shrubs on construction drawings or Project maps. PG&E to monitor for compliance.	Prevent damage to elderberry shrubs.	CSLC	Prior to and during construction
	<b>MM BIO-1g:</b> No chemicals that might harm the beetle shall be used within 100 feet of marked elderberry shrubs.	In vicinity of Poles 2/47 to 2/50, 6/130, and 7/152	PG&E to review list of chemicals anticipated during construction. PG&E to monitor for compliance.	Prevent impacts to elderberry shrubs or valley elderberry longhorn beetle.	CSLC	Prior to and during construction
	<b>MM BIO-1h:</b> Poles to be removed within 50 feet of an elderberry shrub shall be cut off at ground level to minimize disturbance.	In vicinity of Poles 2/47 to 2/50, 6/130, and 7/152	PG&E to map and mark elderberry shrubs on construction drawings or Project maps. Clarify construction technique as appropriate on Project plans. PG&E to monitor for compliance.	Prevent damage to elderberry shrubs.	CSLC	Prior to and during construction
<b>BIO-1:</b> Potential impacts to special-status wildlife species (giant garter snake).	<b>MM BIO-1i:</b> Limit construction within giant garter snake habitat to May 1 through October 1.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark seasonal limits of construction in vicinity of these pole locations on Project maps. PG&E to monitor for compliance.	Prevent impacts to giant garter snake.	CSLC	Prior to and during construction
	<b>MM BIO-1j:</b> Conduct pre-construction surveys within suitable giant garter snake habitat no more than 24 hours in advance of construction to determine presence/absence. If snake is present, delay construction until it is confirmed that snake won't be harmed.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark suitable giant garter snake habitat areas on Project maps and include construction notes detailing construction procedures to avoid impacts to snakes. PG&E to monitor for compliance.	Prevent impacts to giant garter snake.	CSLC	Prior to and during construction

Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	<b>MM BIO-1k:</b> Visually check for giant garter snakes beneath vehicles and equipment prior to moving or operating.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to train construction crews to check for giant garter snake as well as on construction procedures to avoid impacts to snakes. PG&E to observe construction activity to verify compliance.	Prevent impacts to giant garter snake.	CSLC	Prior to and during construction
	<b>MM BIO-1l:</b> A qualified biological monitor shall be present during work in giant garter snake habitat.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E shall have a qualified biologist observe construction activity to verify procedures for avoidance of impacts to giant garter snake.	Prevent impacts to giant garter snake.	CSLC	During construction
	<b>MM BIO-1m:</b> Construction within 200 feet of banks of giant garter snake aquatic habitat shall be avoided and movement of heavy equipment confined to existing roadways.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E shall mark giant garter snake habitat areas on Project maps and include construction notes detailing construction procedures and equipment movements to avoid impacts to giant garter snake aquatic habitat.	Prevent disturbance to giant garter snake aquatic habitat,	CSLC	Prior to and during construction
	<b>MM BIO-1n:</b> Limit construction vehicle speed in giant garter snake habitat areas to 15 miles per hour (MPH),	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark giant garter snake habitat areas on Project maps and include construction notes detailing construction procedures to avoid impacts to snakes. PG&E to observe construction activity to verify compliance.	Prevent impacts to giant garter snake.	CSLC	Prior to and during construction
	<b>MM BIO-1o:</b> Avoidance by construction personnel of giant garter snake habitat areas.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark giant garter snake habitat areas on Project maps. PG&E to observe construction activity to verify compliance.	Prevent disturbance to giant garter snakes and their habitat.	CSLC	Prior to and during construction

Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	<b>MM BIO-1p:</b> All work within giant garter snake habitat will occur during daylight hours.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark giant garter snake habitat areas on Project maps and include construction notes detailing construction procedures to avoid impacts to snakes. PG&E to observe construction activity to verify compliance.	Prevent impacts to giant garter snake.	CSLC	Prior to and during construction
	<b>MM BIO-1q:</b> Any dewatered habitat shall remain dry for 15 consecutive days after April 15.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark giant garter snake habitat areas on Project maps and include construction notes detailing construction procedures to avoid impacts to snakes. PG&E to observe construction activity to verify compliance.	Prevent disturbance to giant garter snake habitat.	CSLC	Prior to and during construction
	<b>MM BIO-1r:</b> Restore impacted aquatic giant garter snake habitat areas to preconstruction conditions (i.e., remove debris, fill, etc.; replant any removed native vegetation).	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark temporarily impacted giant garter snake aquatic habitat areas on Project maps and include construction notes detailing procedures to restore habitat to preconstruction conditions. PG&E to observe construction activity to verify compliance.	Restoration of giant garter snake aquatic habitat to preconstruction conditions.	CSLC	After construction

Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	<b>MM BIO-1s:</b> Restore upland giant garter snake habitat to preconstruction conditions.	In vicinity of Poles 4/80 to 4/94 and 5/103 to 5/112	PG&E to mark temporarily impacted giant garter snake upland habitat areas on Project maps and include construction notes detailing procedures to restore habitat to preconstruction conditions. PG&E to observe construction activity to verify compliance.	Restoration of giant garter snake upland habitat to preconstruction conditions.	CSLC	After construction
	<b>MM BIO-1t:</b> Purchase giant garter snake habitat credits at 3:1 ratio to compensate for permanent net loss of upland snake habitat.	At accredited giant garter snake habitat mitigation bank	Purchase of credits at accredited mitigation bank.	Completed purchase of habitat credits through an approved U.S. Fish and Wildlife Service (USFWS) conservation bank or approved in-lieu fund.	CSLC	Prior to Construction
<b>BIO-1:</b> Potential impacts to special-status wildlife species (birds) and avian species protected by state/federal regulations.	<b>MM BIO-1u:</b> Avoid construction activities within suitable bird nesting habitat during breeding season (March – August). If not possible, conduct preconstruction surveys within 300 feet (500 feet for raptors, 0.25 mile for Swainson's hawk) of construction area no more than 1 week prior to construction to identify active bird species. nests	Entire alignment	PG&E shall ensure a qualified biologist observes construction activity to verify compliance.	Avoidance of impacts to nesting avian species.	CSLC	Prior to and/or during construction (depending on construction timeframe)

Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	<b>MM BIO-1v:</b> Avoid construction activities within 500 feet of active raptor nests, 300 feet for all other bird species.	Entire alignment	PG&E to ensure a qualified biologist observes construction activity to verify compliance.	Avoidance of impacts to nesting avian species.	CSLC	During construction
<b>BIO-1:</b> Potential impacts to special-status wildlife species (mammals).	<b>MM BIO-1w:</b> Conduct preconstruction surveys if construction activity within 300 feet of suitable bat roosting, hibernation, or maternity sites no more than one week prior to construction.	Entire alignment	PG&E to map and mark suitable bat roosting, hibernation, or maternity habitat on construction drawings or Project maps. PG&E to monitor for compliance.	Avoidance of impacts to Townsend's big-eared bat.	CSLC	Prior to construction
	<b>MM BIO-1x:</b> Avoid construction activities to identified active bat activity sites within 300 feet of construction work areas. Biological monitor must monitor construction activity within 300 feet of known bat activity locations.	Within 300 feet of bat roosting, hibernation, or maternal sites	PG&E to mark bat activity areas on Project maps and include construction notes detailing construction procedures to avoid impacts to bats and their habitat. PG&E to observe construction activity to verify compliance.	Avoidance of impacts to Townsend's big-eared bat.	CSLC	Prior to construction
<b>BIO-2:</b> Riparian areas associated with Jack Slough and Feather River may be indirectly impacted (erosion, sedimentation, dust accumulation, chemical spills) by construction activities.	<b>MM BIO-2:</b> Avoid vehicle service or refueling around riparian areas. Erosion, sediment, material stockpile and dust control best management practices shall be employed to avoid runoff from work areas.	Within vicinity of Jack Slough and Feather River	PG&E to mark sensitive riparian areas on Project maps and include construction notes detailing construction avoidance/minimization procedures to avoid indirect impacts. PG&E to observe construction activity to verify compliance.	Prevent indirect impacts on riparian areas associated with Feather River and Jack Slough.	CSLC	Prior to and during construction

Table 5-4 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>BIO-3:</b> Wetland areas may be directly or indirectly impacted during construction.	<b>MM BIO-3:</b> Avoid vehicle service or refueling around wetland areas. Erosion, sediment, material stockpile and dust control best management practices shall be employed to avoid runoff from work areas.	Entire alignment	PG&E to mark sensitive wetland areas on Project maps and include construction notes detailing construction avoidance/minimization procedures to avoid indirect impacts. PG&E to observe construction activity to verify compliance.	Prevent fuel spills or sediment from entering seasonal wetland features.	CSLC	Prior to and during construction
<b>BIO-5:</b> The Project may conflict with local policies or ordinances protecting biological resources.	<b>MM BIO-1a</b> through <b>MM BIO-1x:</b> See discussion of these mitigation measures above.	—	—	—	—	—

1 Table 5-5. Mitigation Monitoring Program – Cultural Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>CUL-1:</b> Impacts to historical resource (abandoned segment of Northern-Electric Railroad).	<b>MM CUL-1:</b> Place new pole 4/90 outside of railroad bed.	Vicinity of Pole 4/90	PG&E to review Project plans to determine appropriate placement of Pole 4/90. PG&E to monitor for compliance.	Ensure that cultural resources are protected and properly managed.	CSLC	Prior to construction
<b>CUL-2:</b> Impacts to undiscovered Holocene-era archaeological deposits.	<b>MM CUL-2a:</b> All pole placement and work areas shall be confined to previously identified areas. If not possible, archaeological monitoring shall occur during construction.	In vicinity of Jack Slough and other waterways	PG&E to review Project plans to ensure that Project facilities in areas with potential to contain buried sites are confined to previously impacted areas. PG&E To provide qualified archaeological monitor during groundbreaking activities to ensure compliance.	Ensure that cultural resources are protected and properly managed.	CSLC	Prior to construction and, if applicable, during construction
	<b>MM CUL-2b:</b> If a resource is discovered, stop work, analysis by CSLC and qualified archaeologist shall occur. Further avoidance shall be ensured per outlined procedures.	Entire alignment	PG&E to prepare report outlining discovery and appropriate action taken.	Ensure that cultural resources are protected and properly managed.	CSLC County of Sacramento Native American Heritage Commission (NAHC)	During construction
<b>CUL-3:</b> Potential impacts to undiscovered paleontological resources.	<b>MM CUL-3:</b> If a resource is discovered, stop work, analysis by CSLC and qualified paleontologist shall occur. Further avoidance shall be ensured per outlined procedures.	Entire alignment	PG&E To prepare report outlining discovery and appropriate action taken.	Ensure that paleontological resources are protected and properly managed.	CSLC County of Sacramento	During construction
<b>CUL-4:</b> Potential impacts to undiscovered buried human remains.	<b>MM CUL-4:</b> If human remains are discovered, stop work, analysis by CSLC and county coroner shall occur. Further avoidance shall be ensured per outlined procedures.	Entire alignment	PG&E to prepare report outlining discovery and appropriate action taken.	Ensure that human remains are protected and properly managed.	CSLC County of Sacramento	During construction

1 Table 5-6. Mitigation Monitoring Program – Geology and Soils

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>GEO-2:</b> Project structural stability could be adversely impacted by ground shaking.	<b>MM GEO-2:</b> PG&E shall conduct a site-specific geotechnical evaluation identifying all geotechnical hazards. The Project shall incorporate all recommendations into Project design.	Entire alignment	PG&E shall ensure that a geotechnical evaluation is prepared by a California registered geotechnical engineer and that all recommendations are incorporated into the Project design.	Eliminates damage to proposed structure and surrounding land uses, in the case of structure failure, from ground shaking, liquefaction, landslide hazards, lateral spreading, subsidence, collapse, and expansive soils.	CSLC	At least 90 days prior to construction
<b>GEO-3:</b> Project structural stability could be adversely impacted by liquefaction.	<b>MM GEO-2:</b> (See discussion of this mitigation measure above).	—	—	—	—	—
<b>GEO-4:</b> Project structural stability could be adversely impacted by landslide hazards.	<b>MM GEO-2:</b> See discussion of this mitigation measure above.	—	—	—	—	—
<b>GEO-6:</b> Project structural stability could be adversely impacted by on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse.	<b>MM GEO-2:</b> See discussion of this mitigation measure above.	—	—	—	—	—
<b>GEO-7:</b> Project structural stability could be adversely impacted by expansive soils.	<b>MM GEO-2:</b> See discussion of this mitigation measure above.	—	—	—	—	—



1 Table 5-7. Mitigation Monitoring Program – Hazards and Hazardous Materials

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>HAZ-2:</b> Release of hazardous materials or substances may occur during construction.	<b>MM HAZ-2a:</b> Handling and disposal of hazards shall occur under the guidance of a licensed professional.	Entire alignment	PG&E to review hazardous material disposal plans to verify compliance. PG&E to observe construction activity to verify compliance.	Reduces potential for unauthorized or accidental release of hazards.	CSLC	Prior to and during construction
	<b>MM HAZ-2b:</b> Ensure proper storage of hazardous materials.	Entire alignment	PG&E to review hazardous material storage locations on Project plans. PG&E to observe construction activity to verify compliance.	Reduces potential for unauthorized or accidental release or contact with hazards.	CSLC	Prior to and during construction
	<b>MM HAZ-2c:</b> Designate appropriate transportation routes for vehicles carrying hazards. Avoid transport of hazards during adverse weather conditions and if not feasible employ best management practices to avoid accidental release into the environment.	Entire alignment	PG&E to ensure that an Occupational Safety and Health Administration professional reviews hazardous material haul routes to avoid hazardous conditions. PG&E to observe vehicle transport activity during adverse weather.	Reduces potential for accidental release of hazards into the environment during transport to/from construction site.	CSLC	Prior to and during construction
<b>HAZ-3:</b> The Project may result in construction activities within close proximity to a school.	<b>MM HAZ-2a through MM HAZ-2c:</b> See discussion of these mitigation measures above.	—	—	—	—	—
<b>HAZ-5:</b> Potential impacts related to airport facilities or low-flying aircraft may occur.	<b>MM HAZ-5a:</b> Notification to Yuba and Sutter County Airports, Beale Air Force Base and Vanderford Ranch Company Airport of construction activity.	Entire alignment	PG&E shall notify airport facilities of construction activities at least 30 days prior to start of construction.	Reduces potential for conflicts with low flying aircraft during construction.	CSLC	30 days prior to construction
	<b>MM HAZ-5b:</b> Notification to Yuba and Sutter County	Entire alignment	PG&E shall notify airport facilities of new transmission	Reduces potential for conflicts with	CSLC	Upon completion

Table 5-7 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	Airports, Beale Air Force Base and Vanderford Ranch Company Airport of new transmission line dimensions.		line dimensions. Notification shall include map and heights of facilities.	low flying aircraft after construction.		of project construction

## 1 Table 5-8. Mitigation Monitoring Program – Hydrology and Water Quality

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>HYD-1:</b> Construction activities may violate water quality standards or waste discharge requirements.	<b>MM HYD-1:</b> Prepare a Stormwater Pollution Prevention Plan prior to construction outlining all best management practices, construction staging areas, scheduling and dewatering.	Entire alignment	PG&E to review Stormwater Pollution Prevention Plan. Ensure commitments are incorporated into Project construction. PG&E to monitor for compliance.	Reduces potential for stormwater pollution.	CSLC RWQCB	Prior to and during construction
<b>HYD-6:</b> Construction activities may degrade water quality.	<b>MM HYD-1:</b> See discussion of this mitigation measure above.	—	—	—	—	—
<b>HYD-9:</b> Pole installation activities may affect structural integrity of flood protection levees.	<b>MM HYD-9a:</b> Use specialized levee drilling techniques to ensure structural stability of levee is not compromised.	Portions of Project on levees	PG&E to provide proof that specialized levee drilling techniques pursuant to Army Corps of Engineer (ACOE) requirements and Central Valley Flood Control Protection Bureau have been incorporated into Project plans.	Reduces potential for levee structural damage during construction.	CSLC Central Valley Flood Control Protection Bureau	Prior to and during construction
	<b>MM HYD-9b:</b> Conduct subsurface testing and remediation, if necessary, within one month after pole installation on levees.	Portions of Project on levees	PG&E to provide proof that subsurface testing and remediation has been completed to the satisfaction of the Central Valley Flood Control Protection Bureau.	Reduces potential for levee structural damage post-construction.	CSLC Central Valley Flood Control Protection Bureau	Within one month after construction

1 Table 5-9. Mitigation Monitoring Program – Noise

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>NOI-1:</b> Construction activities may result in noise, which could affect nearby sensitive receptors.	<b>MM NOI-1a:</b> If drill rig is operated within 200 feet of homes, noise barrier of at least 12 feet in height must be installed.	Within vicinity of residences	PG&E to review construction plans to determine where drill rigs will be used. Ensure that construction plans contain noise barriers in those areas. If applicable, observe construction activity to ensure noise barriers are installed.	Reduces potential impact to sensitive residential receptors by ensuring compliance with local noise ordinances.	CSLC	Prior to and during construction
	<b>MM NOI-1b:</b> All construction shall occur during daytime hours. Nighttime construction shall only occur when daytime temperature limits are exceeded.	Entire alignment	PG&E to observe construction activities to verify compliance.	Reduces potential impacts to sensitive residential receptors by ensuring compliance with local noise ordinances.	CSLC	During construction
	<b>MM NOI-1c:</b> Avoid nighttime mechanical activity work within 2,000 feet of residences.	Entire alignment	PG&E to observe construction activities to verify compliance.	Reduces potential impacts to sensitive residential receptors by ensuring compliance with local noise ordinances.	CSLC	During construction
	<b>MM NOI-1d:</b> Provide advance warning (two to four weeks prior) to all residences within 300 feet of Project work area. Notice shall detail construction work, details, and contact information if questions arise.	Entire alignment	PG&E to review draft notices prior to release to public.	Reduces potential impacts to sensitive residential receptors.	CSLC	During construction (but prior to construction within vicinity of residences)
	<b>MM NOI-1e:</b> Provide a public liaison before and during construction to respond to public questions and concerns.	Entire alignment	PG&E shall coordinate establishment of liaison. PG&E to provide Environmental Compliance Monitor with liaison information.	Provides the community with a resource to answer questions/resolve issues and provides evidence of how complaints were resolved.	CSLC	Prior to construction

Table 5-9 (Continued)

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>NOI-4:</b> Construction activities may result in substantial increase in ambient noise levels.	<b>MM NOI-1a through MM NOI-1e:</b> See discussion of these mitigation measures above.	—	—	—	—	—

1 Table 5-10. Mitigation Monitoring Program – Transportation/Traffic

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>TRA-4:</b> Construction activities may present hazards to roadway/levee trail users.	<b>MM TRA-4a:</b> Coordinate with local traffic/law enforcement during transmission line stringing across roadways.	Where temporary road closures would be required including State Routes 99 and 70	PG&E to provide proof of coordinating efforts with local law enforcement and California Highway Patrol (CHP) as stipulated in the measure.	Ensures traffic flows would be maintained without severe congestion.	CSLC CHP Local law enforcement	During construction
	<b>MM TRA-4b:</b> Prepare a traffic control plan outlining roadway or levee roadway/trail closures, detour routes, and safety compliance measures (e.g., hole coverings).	Entire alignment	PG&E to provide proof that traffic control plan has been reviewed and approved by Marysville Levee District and Reclamation District 10 as stipulated in the measure.	Reduces potential conflicts/injury to motorists and/or levee roadway/trail users.	CSLC Marysville Levee District Reclamation District 10	Prior to construction
<b>TRA-5:</b> Construction may interfere with emergency access.	<b>MM TRA-4a and MM TRA-4b:</b> See discussion of these mitigation measures above.	—	—	—	—	—

1 Table 5-11. Mitigation Monitoring Program – Utilities and Service Systems

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<b>UTI-8:</b> Construction activities may impact underground utilities.	<b>MM UTI-8a:</b> Provide final copy of construction plans detailing location of underground utilities (and how the Project will avoid impacts to said utilities), record of submittal of plans to affected jurisdictions/regulatory agencies, evidence that the Project meets all local requirements for avoidance of underground utilities.	Entire alignment	PG&E to provide proof that construction plans were submitted for review and approval to affected jurisdictions including levee districts and utility companies known within the alignment as stipulated in the measure.	Reduces potential impact to underground utilities.	CSLC Levee Districts	Prior to construction
	<b>MM UTI-8b:</b> Provide advance notice to affected public of any planned electrical outage.	Entire alignment	PG&E to provide proof that notices were distributed to public.	Reduces potential inconvenience of power outage to public.	CSLC	Prior to and/or during construction

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## 6.0 REPORT PREPARATION SOURCES

### 6.1 MND PREPARERS

Table 6-1, Dudek Personnel Involved in MND Preparation, summarizes all Dudek personnel who contributed to this MND.

**Table 6-1. Dudek Personnel Involved in MND Preparation**

Name and Title	Issue Area Prepared or Assisted	Degree	Years of Experience in Subject Field
John Porteous, Principal-in-Charge	Reviewed all sections	San Diego State University MA Geography 1984 University of California, Santa Barbara BA Environmental Studies/Geography 1978	25 years
Sarah Lozano, Project Manager	Reviewed all sections 1.0, Introduction 2.0 Project Description 3.0, Environmental Analysis 3.4, Mandatory Findings of Significance 5.0, Mitigation Monitoring	Cornell University MRP Regional Planning 2003 Willamette University BA Environmental Science & History 1997	10 years
Bethany Andreen, Publications Assistant	Formatted all sections	—	7 years
Keith Babcock, Principal Biologist	3.3.4, Biological Resources	Colorado State University MS Business Management 1984 Colorado State University BS Wildlife Biology 1981	20 years
Matthew Caselli, Production Manager	3.3.11, Noise (Editorial review)	University of California, San Diego BA World Literature 2002	4 years

**Table 6-1 (Continued)**

<b>Name and Title</b>	<b>Issue Area Prepared or Assisted</b>	<b>Degree</b>	<b>Years of Experience in Subject Field</b>
Cynthia Cohen, Technical Editor	7.0, References Cited (Edited)	California State University, Northridge MA English 2007 University of California, Berkeley BS Natural Resource Management 1995	1 year
David Deckman, Principal Air Quality	3.3.3, Air Quality	University of California, Davis MS Ecology 1973 University of California, Los Angeles BS Engineering 1971	30 years
Stephen Dickey, Hydrogeologist	3.3.8 Hydrology and Water Quality	University of Riverside Graduate Work Geophysics and Geology 1990 Occidental College BA Geology 1971	32 years
Becky Golden-Harrell, Technical Editor	Editorial review for all sections	Boston University MS Marketing 2006 California Polytechnic State University, San Luis Obispo BA English 2001	8 years
Andrew Greis, GIS Analyst	Graphics for all sections	Sonoma State University BA Geography 2007	1 year
Brian Grover, Environmental Planner	4.0, Socioeconomic Effects; 3.3.11 Noise	University of North Carolina, Chapel Hill MRP Regional Planning 2007 University of California, San Diego BS Structural Engineering 2005	3 years



**Table 6-1 (Continued)**

<b>Name and Title</b>	<b>Issue Area Prepared or Assisted</b>	<b>Degree</b>	<b>Years of Experience in Subject Field</b>
Heather Hammermeister, Technical Editor and Publications Manager	Editorial oversight for all sections	University of Colorado, Boulder MA Linguistics 2002 University of Nevada, Reno BA Journalism 1996	11 years
Thomas Liddicoat, Biologist	3.3.4, Biological Resources	San Diego State University BS Biological Sciences 2005	3 years
Michael Komula, Acoustician	3.3.11, Noise	Heriot-Watt University MS Acoustics, Vibration, Noise Control 1996 San Diego State University BA Geography 1984	24 years
Rica Nitka, Environmental Planner	3.3.1, Aesthetics	California State Polytechnic University, San Luis Obispo BS Natural Resources Management 1988	20 years
Josh Sanders, Environmental Analyst	3.3.2, Agriculture Resources; 3.3.8 Hydrology and Water Quality; 3.3.9, Land Use and Planning; 3.3.12, Population and Housing; 3.3.13, Public Services; 3.3.14, Recreation; 3.3.15, Transportation/Traffic; 3.3.16, Utilities and Service Systems	University of California, San Diego BA Urban Studies and Planning 2006	3 years
Shawn Shamlou, Environmental Planner	3.3.10, Mineral Resources	Syracuse University MA Geography 1995 San Diego State University BA Geography 1993	14 years

## 1 6.2 MND INFORMATION CONSULTATIONS

### 2 Table 6-2. Consultants Involved in MND Preparation

Name and Title	Firm	Issue Area Assisted	Degree	Years of Experience in Subject Field
Scott Cohen, Managing Engineer	West Coast Environmental	Global climate change	University of California, Santa Barbara BS Mechanical Engineering 1992	17 years
Dharma Cole, Project Engineer	Kennec, Inc.	Water quality	Humboldt State University BS Environmental Resource Engineering 2001	8 years
Robert Dal Farra, Vice President	West Coast Environmental	Global climate change	University of Windsor BASC Chemical Engineering 1981	25 years
Sean Dexter, President	Condor Country Consulting	Cultural resources	California State University, Chico Anthropology MA graduate coursework complete, ABT 1994–1998 University of California, Santa Cruz BA Anthropology 1992	16 years
Dale Schneeberger, President	Golden State Environmental	Hazards	California State University, Long Beach MS Geology 1984 California State University, Fullerton BA Biology 1978 California State University Long Beach BS Geology 1980	30 years experience in geology; 20 years experience in environmental hazards/hazardous materials
Dagan Short, President	Kennec, Inc.	Hydrology and water quality	Portland State University MS Civil Engineering 2001 Humboldt State University BS Environmental Resource Engineering 1997	11 years

## 7.0 REFERENCES

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- 16 U.S.C. 470. Chapter 1A: Historic Sites, Buildings, Objects, and Antiquities; Subchapter II: National Historic Preservations. National Historic Preservation Act of 1966.
- 16 U.S.C. 1531 et seq. Federal Endangered Species Act (FESA) of 1973.
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- 50 CFR 17.11. Part 17: Endangered and threatened wildlife and plants; Subpart B: Lists; Section 17.11: Endangered and threatened wildlife.
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- 547 U.S. 715. *John A. Rapanos, et al. v. United States and June Carabell, et al. v. ACOE.*
- 59 FR 7629. Executive Order 12898 of February 11, 1994. Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. February 16, 1994.
- 67 FR 40657–40679. Notice of review: Endangered and Threatened Wildlife and Plants; Review of species That Are Candidates or Proposed for Listing as Endangered or Threatened; Annual Notice of Findings on Recycled Petitions; Annual Description of Progress on Listing Actions. June 13, 2002.
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2 *for the Pease-Marysville 60 kV Transmission Line Project, Sutter and Yuba*  
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- 4 Brumley, C. 2008. Personal communication from C. Brumley (City of Marysville Payroll  
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1 **8.0 ACRONYMS**

<b>Acronyms and Abbreviations</b>	
<b>Acronym/Abbreviation</b>	<b>Meaning</b>
ACHP	Advisory Council on Historic Preservation
ACOE	Army Corps of Engineers
ATCM	Airborne Toxics Control Measure
ADRP	Archaeological Data Recovery Program
ADT	average daily traffic
ALUC	Airport Land Use Commission
amsl	above mean sea level
APCO	Air Pollution Control Officer
APM	Applicant Proposed Measure
ATCM	Airborne Toxic Control Measure
BAU	business-as-usual
BMP	best management practice
Caltrans	California Department of Transportation
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CBC	California Building Code
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
California EPA	California Environmental Protection Agency
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNPS	California Native Plant Society
CO	carbon monoxide
COG	Council of Governments
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
CRS	Community Rating System
CSLC	California State Lands Commission
CVRWQCB	Central Valley Regional Water Quality Control

<b>Acronyms and Abbreviations</b>	
<b>Acronym/Abbreviation</b>	<b>Meaning</b>
	Board
Delta	Sacramento–San Joaquin River Delta
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EO	Executive Order
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FRAQMD	Feather River Air Quality Management District
g	vertical acceleration force due to gravity
GHG	greenhouse gas
HCP	Habitat Conservation Plan
IWMB	Integrated Waste Management Board
LCFS	Low Carbon Fuel Standard
L <sub>dn</sub>	Day-Night Average Sound Level
LOS	level of service
MBTA	Migratory Bird Treaty Act
MMI	Modified Mercalli Intensity Scale
MMP	Mitigation Monitoring Program
MMRP	Mitigation Monitoring and Reporting Program
MMTCO <sub>2</sub> e	million metric tons carbon dioxide equivalent
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
Mw	moment magnitude
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Community Conservation Plan
NEIC	Northeast Information Center
NCIC	North Central Information Center
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NO <sub>x</sub>	nitrogen oxide



<b>Acronyms and Abbreviations</b>	
<b>Acronym/Abbreviation</b>	<b>Meaning</b>
NO <sub>2</sub>	nitrogen dioxide
NRHP	National Register of Historic Places
O <sub>3</sub>	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OSHA	Occupational Safety and Health Administration
PCB	petroleum hydrocarbon
PERP	Portable Equipment Registration Program
PG&E	Pacific Gas and Electric
PM <sub>2.5</sub>	Respirable particulate matter less than 2.5 microns in diameter
PM <sub>10</sub>	Fine particulate matter less than 10 microns in diameter
ROG	reactive organic gas
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
Small LUP	Small Linear Underground/Overhead Projects
SO <sub>x</sub>	sulfur oxide
SO <sub>2</sub>	sulfur dioxide
SMAQMD	Sacramento Metropolitan Air Quality Management District
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
UBC	Uniform Building Code
USC	United States Code
USDA	United States Department of Agriculture
U.S. EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
VMT	vehicle miles traveled

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